IBM Tealeaf cxVerify
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cxVerify User's Guide

IBM

Contents

Chapter 1. IBM Tealeaf cxVerify overview

The IBM Tealeaf cxVerify User guide provides information on extracting session data based on a schedule and archiving sessions.

IBM Tealeaf cxVerify product overview

IBM Tealeaf cxVerify is a Windows service that runs on the IBM Tealeaf CX server.

Typically, it runs on a separate server from the primary IBM Tealeaf CX server, but it can be installed on the primary server if needed. You can run only one IBM Tealeaf cxVerify server at any time.

IBM Tealeaf cxVerify consists of the following components:

- User interface
- Service that schedules and extracts selected customer session data
- Viewer that enables business users to replay and review customer sessions

The batch-load extraction service can run as a scheduled process or when needed.

cxVerify uses an Extraction API to extract the archived session data. In a single-machine environment, data is extracted from the Long-Term Canister.

How IBM Tealeaf cxVerify works

IBM Tealeaf cxVerify system runs the following tasks.

Procedure

1. Queries the IBM Tealeaf CX Server to return a list of matching sessions.
2. Queries the IBM Tealeaf CX Server to return the XML session document for each matching session.
3. Parses the returned XML and extracts name-value data such as **URL** field name and **URL** field value.
4. Packages the customer session data into a replayable file format.
5. Wraps the replayable session file into a PDF file, with selected metadata.
6. Writes the PDF file with the embedded session to a pre-defined directory, where it can be archived or managed by your existing systems.

cxVerify benefits

There are many benefits to using IBM Tealeaf cxVerify.

IBM Tealeaf cxVerify is a valuable tool which can be used in resolving customer disputes and retaining a comprehensive record of customer interaction for compliance purposes.

Key features include:

- Session data extraction can be defined in a hourly, a daily, or on a custom schedule.

- Session data can be extracted and wrapped in a saved as an Adobe Acrobat PDF file. The PDF file includes critical information, such as the customer ID, date and time, and specific events.
- Session data is embedded with a replay in PDF.
- Selective archiving allows for storage of specific sessions. Archived sessions can be replayed.

IBM Tealeaf documentation and help

IBM Tealeaf provides documentation and help for users, developers, and administrators.

Viewing product documentation

All IBM Tealeaf product documentation is available at the following website:

https://tealeaf.support.ibmcloud.com/

Use the information in the following table to view the product documentation for IBM® Tealeaf®:

Table 1. Getting help

To view...	Do this...
Product documentation	On the IBM Tealeaf portal, go to **?** > **Product Documentation**.
IBM Tealeaf Knowledge Center	On the IBM Tealeaf portal, go to **?** > **Product Documentation** and select *IBM Tealeaf Customer Experience in the ExperienceOne Knowledge Center*.
Help for a page on the IBM Tealeaf Portal	On the IBM Tealeaf portal, go to **?** > **Help for This Page**.
Help for IBM Tealeaf CX PCA	On the IBM Tealeaf CX PCA web interface, select **Guide** to access the *IBM Tealeaf CX PCA Manual*.

Available documents for IBM Tealeaf products

The following table is a list of available documents for all IBM Tealeaf products:

Table 2. Available documentation for IBM Tealeaf products.

IBM Tealeaf products	Available documents
IBM Tealeaf CX	• *IBM Tealeaf Customer Experience Overview Guide* • *IBM Tealeaf CX Client Framework Data Integration Guide* • *IBM Tealeaf CX Configuration Manual* • *IBM Tealeaf CX Cookie Injector Manual* • *IBM Tealeaf CX Databases Guide* • *IBM Tealeaf CX Event Manager Manual* • *IBM Tealeaf CX Glossary* • *IBM Tealeaf CX Installation Manual* • *IBM Tealeaf CX PCA Manual* • *IBM Tealeaf CX PCA Release Notes*
IBM Tealeaf CX	• *IBM Tealeaf CX RealiTea Viewer Client Side Capture Manual* • *IBM Tealeaf CX RealiTea Viewer User Manual* • *IBM Tealeaf CX Release Notes* • *IBM Tealeaf CX Release Upgrade Manual* • *IBM Tealeaf CX Support Troubleshooting FAQ* • *IBM Tealeaf CX Troubleshooting Guide* • *IBM Tealeaf CX UI Capture j2 Guide* • *IBM Tealeaf CX UI Capture j2 Release Notes*
IBM Tealeaf cxImpact	• *IBM Tealeaf cxImpact Administration Manual* • *IBM Tealeaf cxImpact User Manual* • *IBM Tealeaf cxImpact Reporting Guide*
IBM Tealeaf cxConnect	• *IBM Tealeaf cxConnect for Data Analysis Administration Manual* • *IBM Tealeaf cxConnect for Voice of Customer Administration Manual* • *IBM Tealeaf cxConnect for Web Analytics Administration Manual*
IBM Tealeaf cxOverstat	*IBM Tealeaf cxOverstat User Manual*
IBM Tealeaf cxReveal	• *IBM Tealeaf cxReveal Administration Manual* • *IBM Tealeaf cxReveal API Guide* • *IBM Tealeaf cxReveal User Manual*
IBM Tealeaf cxVerify	• *IBM Tealeaf cxVerify Installation Guide* • *IBM Tealeaf cxVerify User's Guide*
IBM Tealeaf cxView	*IBM Tealeaf cxView User's Guide*

Table 2. Available documentation for IBM Tealeaf products (continued).

IBM Tealeaf products	Available documents
IBM Tealeaf CX Mobile	• *IBM Tealeaf CX Mobile Android Logging Framework Guide* • *IBM Tealeaf Android Logging Framework Release Notes* • *IBM Tealeaf CX Mobile Administration Manual* • *IBM Tealeaf CX Mobile User Manual* • *IBM Tealeaf CX Mobile iOS Logging Framework Guide* • *IBM Tealeaf iOS Logging Framework Release Notes*

Chapter 2. Session and archive tasks

You use cxVerify to manage data extractions and move extractions to archives.

Through the IBM Tealeaf Portal, you can configure session and archive tasks.

Creating tasks requires administrator privileges in your IBM Tealeaf Portal account. If you cannot see the IBM Tealeaf menu in the Portal, you do not have administrator privileges.

What is a session task?

Session tasks are used to schedule session data extractions based on servers, data set, and data filters, and then store the data.

Session data provides an accurate representation of the customer's interaction during a visit to your website. A session task is used to extract session data into a PDF file.

When you create a session task, you are extracting the session data. You need to decide on the following scheduling and extraction options:

Table 3. Extracting Session Data Decisions

Decisions	Which tab to look in
When do you want to run the extraction task? • Schedule • Daily extract options • Extraction period • Post extraction commands	General
Where do you want to store the extracted session data?	CX Servers
What data filters do you want to use?	Data Filters
Where do you want the session data to be archived?	Destination
Do you want to password protect the session data?	Digital Signatures
What data fields do you want to displayed in the PDF?	PDF page fields
Who should be notified when the session data task have been completed?	Notifications
What type of session do you want to extract? • Single hit sessions • Session based on a search string	Data Set

Depending on the type of scheduling, IBM Tealeaf cxVerify waits the following time periods:

- For repeated tasks such as daily or hourly task, IBM Tealeaf cxVerify verifies that the session indexes were updated at least 1 hour after the end of the configured extract time.

  If an hourly job is unable to complete in the allotted number of tries, it is skipped and is not reattempted. The next hour, the job is run to collect that hour's data.
- Run Now tasks do not check the indexes.

Extracting session data

You can create a new session extraction task. Session extraction tasks are used to schedule the session extraction based on servers, data set, and data filters.

Procedure

1. From the IBM Tealeaf Portal, select **Tealeaf** > **cxVerify**.
2. Click **Configured Tasks**.
3. Click the **+** icon.
4. Click **Session File Task**. The **General** tab panel is displayed. On this tab, you enter general information about the extraction task.
5. Enter **Name**.
6. Enter **Description**.
7. Select **Scheduling**.
8. Select **Daily Extract Option**.
9. Select **Extraction Period**.
10. Enter any **Post Command**.
11. Select the **Active** check box, if you want this task to run on this schedule.
12. Select the **CX Servers** tab. On this tab, you specify the server from which to extract the session data.
13. Select the check box for the **IBM Tealeaf CX Servers** from which to extract data.
14. Select the **Data Set** tab.
15. Select the **Exclude Single Hit Sessions** check box, if you want to exclude sessions composed of a single request and single response.
16. Select the **Enable Custom Search String** check box, if you want to search based on a custom string.
17. Enter the custom extract search string in the **String** field. You can copy search criteria from RTV or the Portal and copy them into this field.
18. Select the **Custom Search String appears on same page** check box, if you want the search criteria to match the custom extract search string and match the other search parameters for the task must be on the same page.
19. Select the **Data Filters** tab. On this tab, you specify which events to include or exclude session that are based on specific types of data.
20. Select the **Data Filters**. Data Filters choices are **ResponseType**, **URL**, **StatusCode**, **URL fields**, **Cookies**, **Event Ids**, and **Var**. For example, select **Cookie**.
21. Select a **session filter** option. Options are **Include All**, **Exclude All**, **Include Specific**, and **Exclude Specific**. For example, select **Exclude Specific**.
22. Enter any other information. For this example, enter _VIEW. The filter then says exclude all sessions with cookie name _View.

23. Select the **Destination** tab. On this tab, you specify the destination of the archive, depending on the type of archive.
24. For Session Files, click **Session Files** and complete these steps:
    - Select the **Active** check box, if the destination is active one for the task
    - Enter the **PDF** directory.
    - Select the **Write PDF files to daily sub directory**.
    - Select **Merge Sessions** to assemble multiple session fragments into a single session.
    - Enter a **Temp Directory** where the .TLS file is written before it is attached to the PDF.
25. For **Session with Images**, click **Session Files with Images** and complete these steps:
    - Select the **Active** check box, if the destination is active one for the task.
    - Enter the **PDF** directory.
    - Select the **Write PDF files to daily sub directory**.
    - Enter **RTV Profile**.
    - Enter **TLI Directory**.
    - Enter **TLI File Name**.
    - Select **Filename Prefix**.
    - Enter a **Temp Directory** where the .TLS file is written before it is attached to the PDF.
26. Select the **Digital Signature** tab. On this tab, you apply a digital signature to the exported PDF, which ensures that the file can not be altered without detection. Applying a digital signature is optional.
27. To enable the digital signature, select the**Enable** check box.
28. Enter the **Certificate** path.
29. Enter the **Certificate Password**.
30. Select the **PDF Page Fields** tab. On this tab, you specify the data fields that are written into the meta data of the PDF file.
31. Select one of the options, **Set All**, **Clear All**, or select an individual data field to include.
32. Select the **Notification** tab. On this tab, you specify the email addresses that should be notified of task status update.
33. Select **To:** and enter the email addresses. To enter more than one email address, enter the addresses in a comma seperated format.
34. Select **Cc:** and enter the email addresses. To enter more than one email address, enter the addresses in a comma seperated format.
35. Select **Bcc:** and enter the email addresses. To enter more than one email address, enter the addresses in a comma separated format.
36. Click **Save**, when you have finished entering all of the information for this session.

What is an archive task?

Archive tasks are used to archive existing data to an Archive Canister.

Before you create a archive task, you need to make some decisions about the archive.

Table 4. Archiving Data Decisions

Decisions	Which tab to look in
When do you want to run the archive task? • Schedule • Daily extract options • Extraction period • Post extraction commands	General
Where do you want to extracted session data from?	CX Servers
Where do you want the session data to be archived?	Destination
Do you want to trim the archive?	Destination
Do you want to perform a check on the archive?	Destination
Who should be notified when the archiving task have been completed?	Notifications
What type of session do you want to archive? • Single hit sessions • Session based on a search string	Data Set

Archiving session data

You can archive session data. Archive tasks are used to archive the session based on servers, data set, and data filters.

Procedure

1. From the IBM Tealeaf Portal, select **Tealeaf** > **cxVerify**.
2. Click **Configured Tasks**.
3. Click **+** icon. The General task configuration page is displayed. On this tab, you enter general information about the task.
4. Click **Archive Task**. The General tab panel is displayed. On this tab, you enter general information about the archive task.
5. Enter **Name**.
6. Enter **Description**.
7. Select **Scheduling**.
8. Select **Daily Extract Option**.
9. Select **Extraction Period**.
10. Enter the **Post Command**.
11. Select the **Run post command on failled task**, if you want the post command to run on failure.
12. Select the **Active** check box, if you want this task to run on this schedule.
13. Select the **CX Server** tab. On this tab, you specify the server from which to extract data.
14. Select the check box for the **IBM Tealeaf CX Servers from which to extract data**.

15. Select the **Data Set** tab.
16. Select the **Exclude Single Hit Session** check box, if you want to exclude sessions composed of a single request and single response.
17. Select the **Enable Custom Search String** check box, if you want to search based on a custom string.
18. Enter the custom extract search string in the **String** field. You can copy search criteria from RTV or the Portal and copy them into this field.
19. Select the **Custom Search String appears on same page** check box, if you want the search criteria to match the custom extract search string and match the other search parameters for the task must be on the same page.
20. Select the **Destination** tab. On this tab, you specify the destination of the archive, depending on the type of archive.
21. Select **Selective Archive**. Then, enter the Archive Canister information.
22. Select **Trim Archive**. Then, enter the Trim an Archive Canister information.
23. Select **Archive Check**. Then, select active, check and fix, or check only.
24. Select the **Digital Signature** tab. On this tab, you apply a digital signature to the exported PDF, which ensures that the file can not be altered without detection. Applying a digital signature is optional.
25. To enable the digital signature, select the **Enable** check box.
26. Enter the **Certification path**.
27. Enter the **Certificate password**.
28. Select the **PDF Page Fields** tab. On this tab, you specify the data fields that are written into the meta data of the **PDF** file.
29. Select one of the options, **Set All**, **Clear All**, or select an individual data field to include.
30. Select the **Notification** tab. On this tab, you specify the email addresses that should be notified of task status update.
31. Select **To:** and enter the email addresses. To enter more than one email address, enter the addresses in a comma seperated format.
32. Select **Cc:** and enter the email addresses. To enter more than one email address, enter the addresses in a comma seperated format.
33. Select **Bcc:** and enter the email addresses. To enter more than one email address, enter the addresses in a comma separated format.
34. Click **Save**, when you have finished entering all of the information for this session.

Viewing tasks

You can view extraction and archive tasks configured in cxVerify. Task information includes, **ID**, **Task Name**, **Enabled**, **Start Time**, and **Schedule Type**.

Procedure

1. Access and log into the IBM Tealeaf Portal. The **Portal Management** panel is displayed.
2. Select **Tealeaf** > **cxVerify**.
3. Click **Configured Tasks**.

Editing tasks

You can edit extraction and archive tasks.

Procedure

1. From the IBM Tealeaf Portal, select **Tealeaf** > **cxVerify**.
2. Click **Configured Tasks**.
3. Select the task you want to edit.
4. Click the **Pencil** icon.
5. Update any of the fields as required.
6. Click **Save**.

Removing tasks

You can remove extraction and archive tasks configured in cxVerify.

Procedure

1. From the IBM Tealeaf Portal, select **Tealeaf** > **cxVerify**.
2. Click **Configured Tasks**.
3. Select the task you want to edit.
4. Click the **-** icon.
5. Click yes to confirm that you want to remove the task.

cxVerify field definitions for extraction and archive tasks

If you need more information about populating fields during an extraction or archiving task, you can find them here.

General field names and field definitions

This list contains the field names and field definitions for the General tab:

- **Name** - the name for the task, which is displayed in the Configured Tasks and Scheduled Tasks windows. Illegal characters are removed from the Name when the task is saved.
- **Description** - the description for the task.
- **Scheduling** - the schedule for when the task is to run. Choose one of the following:
  - **Run Now** - As soon as the task is configured, run it immediately.
  - **Run Once** - Run the task at the scheduled time and then do not run it again.
  - **Run Daily** - Run the task at the scheduled time each day. To account for the processes of indexing sessions and canister session timeout settings, it is recommended that any daily tasks be scheduled after 02:00:00 each night.
  - **Run Hourly** - Run the task every hour of every day.
- **Daily Extract Option** - If you schedule a Daily extract task, you can choose to extract from the current day, the previous day, or some day in the past, as specified by the number of days that are entered in the text box. Your selections auto-populate the Extraction Period settings.
  - **Current Day** - Extracts sessions from today's date. If you want a full 24 hours worth of data, schedule this for just before midnight
  - **Previous Day** - Extracts sessions from yesterday's date.
  - **N-th Day** ago - where N is how many days ago.
- **Extraction Period** - The time period from which to extract session data. These fields are constrained based on the **Scheduling** selection. You can apply more

filters to the data through the Data Filters tab. Some session data can be excluded as part of the data extract through the Data Set tab.

- **Enable Custom Extract Commands** - If you must apply custom commands to the data extractor on the host computer, select this option, and enter the command. While the extractor understands a small set of commands, this option is rarely used on recent installations.
- **Post Command** - To run a command after the task finishes successfully, enter a command in the Post Command text box. For example, if you are generating log files, you can move the log files to an archive location after they are created. You run this command at the command line of the host operating system for the extractor. To run this command even if the task fails, select the check box.

  The default directory for the command is `<Tealeaf_install_directory>\DataExtractor`.

  Note: Post commands run as separate tasks after the current task. These tasks can be tracked as scheduled tasks. For more information, see the *IBM Tealeaf cxConnect for Data Analysis for Administration Manual*.
- **Active** - Select the Active check box to enable the task to be run according to schedule.

Data Set field names and field definitions

This list contains the field names and field definitions for the Data Set tab:

- **Exclude Single Hit Sessions** - Select this option to exclude sessions that are composed of a single request and a single response. These sessions are often not interesting to users.
- **Enable Custom Extract String** - In the Portal or the IBM Tealeaf CX RealiTea Viewer, you can search for specific sessions. For example, you can search for specific values in fields in the session data.

  You can copy search criteria from RTV or the Portal and paste them into this field. For more information about the syntax, see the *IBM Tealeaf RealiTea Viewer User Manual*.
- **Custom Search String appears on same page** - When enabled, matches of the custom search string and matches of the other search parameters for the task must appear on the same page to be displayed in the results. Searches configured with this option are limited to retrieving and extracting a maximum of 16,384 sessions.

Data Filter field names and field definitions

This list contains the field names and field definitions for the Data Filter tab:

- **Rsp Types** - Sessions that are filtered by Response type value. For example, you can include all sessions with RspType of `text/html`.
- **URLs** - Sessions can be filtered by URL.
- **StatusCode** - Sessions can be filtered by the status code that is returned by the server.
- **URL Fields** - Sessions can be filtered by URL field name.
- **Cookies** - Sessions can be filtered by the cookie name.
- **App Data** - Session can be filtered by `[appdata]` field name.
- **Hits** - Sessions can be filtered by HTTP status code.
- **Event IDs** - Sessions can be filtered by the Event ID.
- **Vars** - Sessions can be filtered by event variable name.

Destination field names and field definitions

This list contains the field names and field definitions for the Destination tab:

Session Files fields:
- **Active** - If this destination is the active one for this task, check **Active**.
- **PDF Directory** - The directory for PDF files.
- **Merge Sessions** - Select this option to assemble multiple session fragments into a single session.
- **Temp Directory** - Specify the directory where the .TLS file is written before it is attached to the PDF.

Session File with Images fields:
- **Active** - If this destination is the active one for this task, check **Active**.
- **PDF Directory** - The directory for PDF files
- **Merge Sessions** - Select this option to assemble multiple session fragments into a single session.
- **RTV Profile** - Enter the name of theCX RealiTea Viewer profile that contains the user settings to apply to the export. Through a profile, you can configure specific user settings to apply to the outputted file. For example, some environments do not provide access to the enterprise customer-facing website. Instead, you are be required to specify an internal server for access through the profile settings.
- **TLI Directory** - This directory specifies a local cache of images, Java™ files, and other environmental data. By referencing a local cache, the export process does not need to retrieve these items from the server for each exported session.
- **TLI Filename** - Enter the root file name of the TLI file that is in the TLI directory. You do not need to specify the file extension.
- **Filename** - Select the date stamp append string that is used in the IBM Tealeaf image file name.
- **Temp Directory** - Specify the directory where the .TLS file is written before it is attached to the PDF.
- **Portal Authentication** - If the Portal manages authentication of user accounts through its own mechanisms, you must supply IBM Tealeaf cxVerify with a user name and password with which it can access the Portal to retrieve sessions.

Digital Signature field names and field definitions

This list contains the field names and field definitions for the Digital Signature tab:
- **Enabled** - Select to include the specified digital signature in the PDF file.
- **Certificate Path** - The location of the digital certificate.
- **Certificate Password** - The password to access the digital certificate.

PDF Page field names and field definitions

This list contains the field names and field definitions for the PDF Page tab:
- To include all fields, click **Set All**.
- To include a field, select the check box next to its name.
- To clear all fields, click **Clear All**.

Notification field names and field definitions

This list contains the field names and field definitions for the Notification tab:

- **To** - Enter a comma-separated list of email addresses to receive updates on the task status.
- **Cc** - Enter a comma-separated list of email addresses to receive a copy of updates on the task status.
- **Bcc** - Enter a comma-separated list of email addresses to receive a blind copy update on the task status.

Chapter 3. Scheduled tasks

You can view the status of scheduled tasks, check task status, run tasks again, stop tasks and disable tasks in cxVerify.

Viewing scheduled tasks

You can view a list of all scheduled cxVerify tasks. You can use this list to monitor your scheduled tasks.

Procedure

1. From the IBM Tealeaf Portal, select **Tealeaf** > **cxVerify**.
2. Click **Scheduled Tasks**.

   The list of scheduled tasks are displayed.

Checking task status

You can monitor task status. The task status is displayed in the Information column.

Procedure

1. From the IBM Tealeaf Portal, select **Tealeaf** > **cxVerify**.
2. Click **Scheduled Tasks**.

   The list of scheduled tasks are displayed. In the **Information** column, you can monitor the progress of the task completion.

   When the task is complete, the **Information** column field value concludes with **Processed**.
3. To refresh the display, click **Refresh**.

Running the task again

You may find it necessary to run a task immediately. As soon as you click Run Task again, the task runs.

Procedure

1. From the IBM Tealeaf Portal, select **Tealeaf** > **cxVerify**.
2. Click **Configured Tasks**. The list of configured tasks are displayed.
3. Right click on the task you want to run again and select **Run Task Again**.

Stopping the task

At some point in time, you might need to stop a extraction or archive task that is currently running or stop a task that is scheduled in the future.

Procedure

1. From the IBM Tealeaf Portal, select **Tealeaf** > **cxVerify**.
2. Click **Configured Tasks**. The list of configured tasks are displayed.
3. Right click on the task for which you want to stop and select **Stop Task**.

Disabling the task

You might want to disable a task. By doing this you are clearing the enable flag for the task and removing the task from the schedule. You can only disable tasks that are scheduled or waiting to be scheduled.

Procedure

1. From the IBM Tealeaf Portal, select **Tealeaf** > **cxVerify**.
2. Click **Configure Tasks**. The list of configured tasks are displayed.
3. Right click on the task you want to disable and select **Disable Task**.

cxVerify field definitions for scheduled tasks

If you need more information about fields while you are monitoring scheduled tasks, you can find them here.

Field Definitions

- **Name** - the name for the task, which is displayed in the Configured Tasks and Scheduled Tasks windows. Illegal characters are removed from the Name when the task is saved.
- **Description** - the description for the task.
- **Scheduling** - the schedule for when the task is to run. Choose one of the following:
  - **Run Now** - As soon as the task is configured, run it immediatel.y
  - **Run Once** - Run the task at the scheduled time and then do not run it again.
  - **Run Daily** - Run the task at the scheduled time each day.
  - **Run Hourly** - Run the task every hour of every day.
- **ID** - contains the internal identifier for the task. Identifiers are used by IBM Tealeaf cxVerify tasks, hidden internal tasks, and IBM Tealeaf cxConnect for Data Analysis tasks, if it is installed.
- **Name** - The name for the task.
- **Status** - The status of the task. To refresh the status of all tasks in the window, click **Refresh**.
  - **Waiting to Run** - The task is scheduled to run
  - **Completed** - The scheduled task completed successfully. To run a task again, select the task and click **Run Again**.
  - **Failed** - The scheduled task failed to complete. To find out why, select the task and click **View Log**.
  - **Stopped** - The scheduled task was stopped by a user.
  - **Running** - The scheduled task is running. To stop any task, select it and click **Stop Task**.
- **Start Time** - The date and time for the next time the task is scheduled to run. Time is based on a 24-hour clock. Timestamps for when the task actually started are labeled with an asterisk (*).
- **Information** - A short message that indicates the results of the task. For more information, see the log for the task.

Chapter 4. IBM Tealeaf cxVerify trouble shooting tips

You may encounter error messages or error situations while using cxVerify. Use the troubleshooting tips to resolve the issues.

Viewing log files

cxVerify has a log file and an extended log file. These log files might be helpful when troubleshooting system errors.

Procedure

1. From the IBM Tealeaf Portal, select **Tealeaf** > **cxVerify**.
2. Click **Configure Tasks**. The list of configured tasks are displayed.
3. Right click on the task for which you want to view a log file and select **View Log** or **View Extended Log**. The log file is displayed.

Network interruption causes extractor service to fails

Network interruptions can cause the extractor service to fail.

Typically, tasks fail when there are network interruptions, or the Extractor Service is unable to connect to a canister. When a task fails, IBM Tealeaf cxVerify tries to complete the task a predefined number of times.

- Errors are reported in the Extractor log and the IBM Tealeaf cxVerify Tasks log.
- This number of repeat attempts can be configured through the Extractor Service configuration in TMS. For more information, see the *IBM Tealeaf cxImpact Administration Manual*.

If the number of failures reaches the limit, then the task is resumed at the next scheduled time.

Note: When a rescheduled task is resumed, the extraction resumes where it left off. For example, if the extraction was midway through the second of three canisters, the sessions in the first canister and the first half of the second canister are not re-extracted.

Handling socket exceptions

You need to determine why a socket exception has occurred.

If the data extraction process receives a socket exception while it is communicating with the IBM Tealeaf Processing Server, it pings the IBM Tealeaf CX Server. It then takes one of the following actions:

- If the server is not reachable for a configurable period, IBM Tealeaf cxVerify stops processing for that server and logs an error. If there is more than one IBM Tealeaf CX Server, it attempts to connect to the next server.
- If the IBM Tealeaf CX Server is reachable, it tries to contact the IBM Tealeaf Search Server service. If the IBM Tealeaf Search Server service is not responding for a configurable period, it stops processing for that server and logs an error. If there are multiple IBM Tealeaf CX Servers, the extractor process attempts to connect to the next server.

Daily tasks fail to start when scheduled

You need to determine why daily tasks fail to start when scheduled.

IBM Tealeaf cxVerify delays the start of a daily task until all sessions to be extracted were indexed into the Long Term Canister. IBM Tealeaf cxVerify inserts an extra time margin to ensure that any idle sessions in the canister expired.

Any IBM Tealeaf cxVerify daily task has an end time of 24:00, and the task cannot begin until one hour after the last session was indexed. This one-hour buffer ensures that all sessions marked as "closed" had time to be indexed. For a daily task that extracts yesterday's data (00:00 - 24:00 of the date before today), the earliest start time is 1:00 am.

In addition to the one-hour buffer, sessions do not close until the canister session idle time expired. If the session idle time is set for 30 minutes, the earliest executable start time is 1:30 am.

Suppose that the Nightly Extract is scheduled to run at 00:01 each morning. At 00:01 the Nightly Extract attempts to run and checks the session indexes.
- The last indexed session time was 23:49:50 from the previous day, so the one hour buffer test that failed and the task is scheduled to run again at 01:01.
- At 00:55, the Nightly Extract attempts to schedule a run at 01:01 and checks the session indexes. Since the last indexed session time was 23:59:43 from the previous day, the one-hour buffer test failed at the time of the test, and the task was scheduled to run again at 02:01.
- At 01:55 the Nightly Extract attempts to schedule a run at 02:01 and checks the session indexes. The index test passes, and the task is scheduled and started at 02:01:01.

Note: To account for the processes of indexing sessions and canister session timeout settings, it is recommended that any daily tasks be scheduled after 02:00:00 each night.

Error message: Revocation information is not available

You need to determine why the error message, revocation information is not available has occurred.

About this task

When IBM Tealeaf cxVerify jobs are failing because RTV is unable to retrieve images, you may receive the following error message about the security certificate:

```
revocation information is not available
```

In this case, the issue is caused by RTV attempting to access images that are stored in a location that requires a security certificate. Since RTV uses an embedded version of Internet Explorer, you can circumvent this issue by making a configuration change in IE.

Procedure
1. Close RTV, if it is open.
2. Open Internet Explorer.
3. In the **IE** menu, select **Tools** > **Internet Options**.

4. Click the **Advanced** tab.

5. Scroll to the Security heading.

6. Clear `Check for server certificate revocation`.

7. Click **OK**.

8. Close Internet Explorer.

9. Restart RTV.

Results

After the above configuration change was performed, RTV should be able to capture the images, and the IBM Tealeaf cxVerify task should complete.

Error Message: Invalid HTTP response status 401

You need to determine why the error message, Search Server, invalid HTTP response status 401 has occurred.

About this task

When running IBM Tealeaf cxVerify data extractor jobs, you may see errors similar to the following:

```
9/29/2009 12:23:36 PM │ Reading event definitions ...
9/29/2009 12:23:36 PM │ Search server error (HQA:19000):
TeaLeaf.SearchServer.SearchServerException:
SearchServerCS.TalkToRealSearchServer(): Invalid HTTP response status 401
at TeaLeaf.SearchServer.RealSearchServer.RealCommunicate(String command,
ArrayList args, Int32 timeout)
at TeaLeaf.SearchServer.TLSearchServer.GetEventListMS(Boolean log, Int32
timeout)
9/29/2009 12:23:36 PM │ Trying to get event list from search server
HQA:19000...
```

The IBM Tealeaf cxVerify is attempting to run the data extraction task as the local system administrator account. Under NT authentication, it is recommended that the DataExtractor use a local non-system account.

Procedure

1. Review the logs to verify the NT user being used to connect. You should see an entry like the following:

   ```
   9/29/2009 12:23:35 PM │ NtAuthorization server: HQA:19000, user:
   NT_AUTH\SYSTEM
   ```

2. The above indicates that a local system admin account user is in use: `NT_AUTH\SYSTEM`.

3. Change the account to use:

   a. On the server, open the Windows Services Control Panel.

   b. In the list of services, double-click `Tealeaf Extractor Service`.

   c. Click the **Log On** tab.

   d. Click **This Account**.

   e. Specify the account to use.

   f. Click **OK**.

4. In the Domain controller, verify that the above user is part of the Admin group for the domain, which ensures that the user has access to the other servers in the domain.

5. In the Tealeaf Portal, add the above account to the IBM Tealeaf cxImpact Admin group.

   a. In the **Portal** menu, select **Tealeaf** > **Portal Management**.

   b. In the Portal Management page, click the IBM Tealeaf CX User Administration heading.

   c. Click the **Groups** link.

   d. Select **Admin Group**.

   e. Click **Assign Users**.

   f. Select a check box next to the above user.

   g. Click **Save**.

6. Restart all Tealeaf Services.

Chapter 5. IBM Tealeaf cxVerify metadata fields

The chapter provides information on IBM Tealeaf cxVerify metadata fields that can be used in PDF files.

Metadata field descriptions

This topics provides field names and description for meta data used in IBM Tealeaf cxVerify.

Table 5. Field Descriptions

Field Name	Description	PDF Note #
SessionDateTime	Session DateTime stamp	1
ExtractDateTime	Extract DateTime stamp	2
LoginID	User Login ID • This value is taken from Session Attribute 00.	3
RemoteAddr	Client IP address	4
Url	Session URL titles	5
UrlFields	IBM TealeafURL fields	6
AppData	IBM Tealeaf Application Data	7
Cookies	Cookies	8
EventID	Event ID	9
EventTitle	Event Title	10
EventTextFound	Event Text Found or fact value	11
EventValueID	Event Value ID	12
EventValueDescription	Event Value Description	13
SessionMerges	Number of Session Merges	14
CanisterName	Canister Name	19
SessionID	Canister ID	20
TLTSID	IBM Tealeaf Session ID	21
TLTUID	IBM Tealeaf User ID	22
HitCount	Number of Hits	23
ExtractSearchString	Extract Search String	24
SesnAttr	"Session attributes"	

Session attributes

Session attributes fields 05-63 are also included in the output as the `SesnAttr` values.

Legacy support for event definitions

This topic provides information on how pre-Release 8.0 event definitions are mapped into Release 8.0 IBM Tealeaf cxVerify data fields.

The No Dimension Report Group report group, which is associated with all events, can be exported through IBM Tealeaf cxVerify.

The following table describes how pre-Release 8.0 event definitions are mapped into Release 8.0 IBM Tealeaf cxVerify data fields.

Table 6. Legacy Support for Event Definitions

Item	Release 8.0 or later field	pre-Release 8.0 field
Event Name	Eventname	event_name
Event ID	Event ID	unique_id
Category ID	empty	category_id
Session Event	N	session_event
Dimension Group	group_name	N/A
Enum ID	empty	enum_id
Fact Dim Value 0	Fact dimvalue0	text_found
Fact Dim Value 1 - Fact Dim Value 3	not mapped currently	N/A
Login ID	Session Attribute 00	Login ID
Session attribute 1	Session Attribute 01	UserDef 1
Session attribute 2	Session Attribute 02	UserDef 2
Session attribute 3	Session Attribute 03	UserDef 3
Session attribute 4	Session Attribute 04	UserDef 4

Example outputs

Double click on the icon to replay Tealeaf Session.

```
19  Canister:           LSSN_20080925_RAINIER
20  SessionID:          1152917
1   Session Date:       9/26/2008 00:04:38 GDT
2   Extract Date:       9/26/2008 18:42:00 GDT
4   Client IP:          63.194.158.150
3   User Name:          5F9E538445427818D7486E99821CEEAE
15  UserDef1:           www.tealeaf.com
18  UserDef4:           us
21  TLTSID:             5F9E538445427818D7486E99821CEEAE
22  TLTUID:             3D7D138D43E5F4AFFBEC578CE36A45A0
9   EventIDs:           17 23 49 73 74 77 82 86 449 479 480 50 75 78 175
                        21 184 25 26 27 43 44 83 84 162 90 92 100 101
                        106 439 253 204 208 156 164 163 481 484 115 154
                        155 153 18 22 102 166 1
10  Event Titles:       HTTP 200 - All Hits, Status Codes, HTTP 200
                        Status Code (All Hits), Copy of HTTP 200 Status
                        Code (All Hits), HTTP 200 (from scratch), Http
                        200 - OK Page, Event Value - HTTP Status

6   URL fields:
      KeepThis -             true

7   Application Data:
      TLT_HOST_NAME -        www.tealeaf.com
      TLT_URL -              /defaultpage /products/cximpact.asp
                             /products/quicktour_cximpact/quicktour_cximpact.a
                             sp /products/cxview.asp
                             /products/quicktour_cxview/quicktour_cxview.asp
      TLT_GEO_REGION -       CA
    TLT_GEO_COUNTRY_CODE - US

12  Event Value IDs:    2001 1342 1052 1001 1009 1065 1068 1233 1140 1141
                        1079
13  Event Value Titles: 200+, 1 to 1,000,000, Less than 10,000, West,
                        California 2, T1, North America, English,
                        cxImpact, cxView, 6-10 Pages,

12  Event Value IDs:    2001 1342 1052 1001 1009 1065 1068 1233 1140 1141
                        1079
13  Event Value Titles: 200+, 1 to 1,000,000, Less than 10,000, West,
                        California 2, T1, North America, English,
                        cxImpact, cxView, 6-10 Pages,
```

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